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Amendments to the Claims

This listing of the claims will replace all prior listing of the claims in this application.

Listing of the Claims

1. (Original) A compound having the formula:

wherein

 X^1 is -O or -N=;

L¹ is a bond, substituted or unsubstituted alkylene, or substituted or unsubstituted heteroalkylene; and

R¹ has the formula:

$$-\frac{\xi}{\xi} - L^4 - L^5 - R^3$$

$$\begin{pmatrix} \chi^2 \\ R^4 \\ n \end{pmatrix}, \text{ or }$$

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wherein

n is 0 or 1;

$$X^{2}$$
 is $-N(R^{4})$ - or $-CH(R^{4})$ -;

L², L³, L⁴, and L⁵ are independently a bond, substituted or unsubstituted alkylene, substituted or unsubstituted heteroalkylene, or substituted or unsubstituted heterocycloalkylene; and

R², R³, and R⁴ are independently hydrogen, substituted or unsubstituted allcyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl,

wherein if X is -C=, L^2 is a bond, L^3 is unsubstituted alkylene, R^1 is (1), and R^1 is para to $-L^1$ -B(OH)₂, then R^2 is not substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl.

2. (Original) The compound of claim 1, wherein

 L^1 is a bond, substituted or unsubstituted C_1 - C_{20} alkylene, or substituted or unsubstituted 2 to 20 membered heteroalkylene;

L², L³, L⁴, and L⁵ are independently a bond, substituted or unsubstituted C₁-C₂₀ alkylene, substituted or unsubstituted 2 to 20 membered heteroalkylene, or substituted or unsubstituted 3 to 8 membered heterocycloalkylene; and

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 R^2 , R^3 , and R^4 are independently hydrogen, substituted or unsubstituted C_1 - C_{20} alkyl, substituted or unsubstituted 2 to 20 membered heteroalkyl, substituted or unsubstituted C_3 - C_8 cycloalkyl, substituted or unsubstituted 3 to 8 membered heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl.

3. (Original) The compound of claim 1, wherein

 L^1 is a bond, unsubstituted C_1 - C_{10} alkylene, or unsubstituted 2 to 10 membered heteroalkylene;

 L^2 , L^3 , L^4 and L^5 are independently a bond, unsubstituted C_1 - C_{10} alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene; and

 R^2 , R^3 , and R^4 are independently hydrogen, substituted or unsubstituted C_1 - C_{10} alkyl, substituted or unsubstituted 2 to 10 membered heteroalkyl, substituted or unsubstituted C_3 - C_8 cycloalkyl, substituted or unsubstituted 3 to 8 membered heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl.

4. (Original) The compound of claim 1, wherein

 L^1 is abond, substituted or unsubstituted C_1 - C_{10} alkylene, or substituted or unsubstituted 2 to 10 membered heteroalkylene; and

L², L³, L⁴, and L⁵ are independently a bond, substituted or unsubstituted d-C10 alkylene, substituted or unsubstituted 2 to 10 membered heteroalkylene, or substituted or unsubstituted 3 to 8 membered heterocycloalkylene.

5. (Original) The compound of claim 1, wherein R has the formula (1), wherein

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 L^2 is a bond, unsubstituted C_1 - C_{10} alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene;

 L^3 is a bond, unsubstituted C_1 - C_{10} alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene; and

 R^2 is R^{21} -substituted or unsubstituted C_1 - C_{15} alkyl, R^{21} -substituted or unsubstituted 2 to 10 membered heteroalkyl, R^{21} -substituted or unsubstituted C_3 - C_8 cycloalkyl, R^{21} -substituted or unsubstituted 3 to 8 membered heterocycloalkyl, R^{21} -substituted or unsubstituted aryl, or R^{21} -substituted or unsubstituted heteroaryl, wherein

 R^{21} is a halogen, -OH, -SH, -NH₂, -CF₃, -B(OH)₂, -C(0)NHOH, unsubstituted C_1 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C_3 - C_8 cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -OR²², wherein

 R^{22} is unsubstituted C_3 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C_3 - C_8 cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or - $(CH_2)_qB(OH)_2$, wherein q is an integer from 1 to 5.

- 6. (Original) The compound of claim 1, wherein R¹ has the formula (1), wherein
 - L² is a bond, or unsubstituted 3 to 8 membered heterocycloalkylene;
 - L³ is unsubstituted C₁-C₁₀ alkylene; and
 - R^2 is R^{21} -substituted or unsubstituted C_1 - C_{15} alkyl, or R^{21} -substituted or unsubstituted aryl, wherein

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 R^{21} is halogen, -OH, -SH, -NH₂, -CF₃, -B(OH)₂, -C(0)NHOH, unsubstituted C_1 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C_3 - C_8 cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -OR²², wherein

 R^{22} is unsubstituted $C_1\text{-}C_{10}$ alkyl, or unsubstituted 2 to 10 membered heteroalkyl.

7. (Original) The compound of claim 6, wherein

L² is a bond or piperazinylene;

L³ is unsubstituted C1-C3 alkenylene;

 R^2 is unsubstituted C_1 - C_{15} alkyl, or R^{21} -substituted or unsubstituted aryl, wherein R^{21} is halogen, -C(0)NHOH, unsubstituted C_1 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, or -OR , wherein R^{22} is unsubstituted C_1 - C_{10} alkyl, or unsubstituted 2 to 10 membered heteroalkyl.

8. (Original) The compound of claim 1, wherein R^1 has the formula (2) or (3), wherein L^4 and L^5 are independently a bond, unsubstituted C_1 - C_{10} alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene;

 R^4 is unsubstituted C_1 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C_3 - C_8 cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, or unsubstituted heteroaryl;

 R^3 is R^{31} -substituted or unsubstituted C_1 - C_{10} alkyl, R^{31} -substituted or unsubstituted 2 to 10 membered heteroalkyl, R-substituted or unsubstituted C_3 - C_8 cycloalkyl, R^{31} -substituted or unsubstituted 3 to 8 membered heterocycloalkyl, R^{31} -substituted or unsubstituted aryl, or R^{31} -substituted or unsubstituted heteroaryl, wherein

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 R^{31} is halogen, -OH, -SH, -NH₂, -CF₃, -B(OH)₂, -C(0)NHOH, unsubstituted C₁-C₁₀ alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C₃-C₈ cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -OR³², wherein

 R^{32} is unsubstituted C_1 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C_3 - C_8 cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -(CH2)_mB(OH)₂, wherein m is an integer from 1 to 5.

9. (Original) The compound of claim 1, wherein R^1 has the formula (1) or (2), wherein L^4 and L^5 are unsubstituted C_1 - C_{10} alkylene;

R⁴ is unsubstituted C₁-C₁₀ alkyl:

R³ is R³¹-substituted aryl, wherein

 R^{31} is a halogen, -C(0)NHOH, unsubstituted C_1 - C_{10} alkyl, unsubstituted 2 to 10 membered heteroalkyl, or -OR³², wherein

 R^{32} is an unsubstituted Ci-Cio alkyl, unsubstituted 2 to 10 membered heteroalkyl, or - $(CH2)_mB(OH)_2$, wherein m is 1 to 5.

- 10. (Original) The compound of claim 9, wherein L^4 and L^5 are unsubstituted C_1 - C_3 alkenylene.
- 11. (Original) The compound of claim 1, wherein R¹ is para to -L¹-B(OH)₂.
- 12. (Original) The compound of claim 1, wherein X is -C=.
- 13. (Original) The compound of claim 1, wherein L¹ is a bond or methylene.

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14. (Withdrawn) A method of treating a tumor or cancer in a patient in need thereof comprising administering to said patient an effective amount of a compound having the Formula:

wherein

 X^1 is -O or -N=;

 L^1 is a bond, substituted or unsubstituted alkylene, or substituted or unsubstituted heteroalkylene; and

R¹ has the formula:

$$\begin{cases} & \begin{cases} & \\ & \\ & \end{cases} \\ & \\ & \end{cases} = \begin{bmatrix} \\ \\ \\ \\ \\ \end{bmatrix} \\ C = \begin{bmatrix} \\ \\ \\ \\ \end{bmatrix} \\ C = \begin{bmatrix} \\ \\ \\ \\ \end{bmatrix} \\ C = \begin{bmatrix} \\ \\$$

$$-\frac{\xi}{\xi} - L^4 - \int_{\mathbb{R}^4}^{0} L^5 - \mathbb{R}^3$$
, or

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wherein

n is 0 or 1:

 X^{2} is $-N(R^{4})$ - or $-CH(R^{4})$ -;

L², L³, L⁴, and L⁵ are independently a bond, substituted or unsubstituted alkylene, substituted or unsubstituted heteroalkylene, or substituted or unsubstituted heterocycloalkylene; and

R², R³, and R⁴ are independently hydrogen, substituted or unsubstituted allcyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl,

wherein if X is -C=, L^2 is a bond, L^3 is unsubstituted alkylene, R^1 is (1), and R^1 is para to - L^1 -B(OH)₂, then R^2 is not substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl.

- 15. (Withdrawn) The method of claim 14, wherein said tumor is selected from the group consisting of breast, cervical, stomach, colon, bladder, rectal, liver, pancreatic, lung, cervix uteri, corpus uteri, ovary, prostate, testis, renal, brain/cns, head, neck, throat, anal and oral cancers, eye or ocular cancer, skin melanoma, Ewing's Sarcoma, Kaposi's Sarcoma, basal cell carcinoma and squamous cell carcinoma, small cell lung cancer, mouth/pharynx, esophageal, larynx, kidney and lymphoma, acute lymphocytic leukemia, and acute myelogenous leukemia.
- 16. (Withdrawn) A method of inhibiting MDM2 expression in a mammal, comprising administering an amount of a compound effective to inhibit said expression, said compound having the Formula:

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wherein

 X^1 is -O or -N=;

 L^1 is a bond, substituted or unsubstituted alkylene, or substituted or unsubstituted heteroalkylene; and

R¹ has the formula:

wherein

(2)

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n is 0 or 1;

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$$X^{2}$$
 is $-N(R^{4})$ - or $-CH(R^{4})$ -;

L², L³, L⁴, and L⁵ are independently a bond, substituted or unsubstituted alkylene, substituted or unsubstituted heteroalkylene, or substituted or unsubstituted heterocycloalkylene; and

R², R³, and R⁴ are independently hydrogen, substituted or unsubstituted allcyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl,

wherein if X is -C=, L^2 is a bond, L^3 is unsubstituted alkylene, R^1 is (1), and R^1 is para to - L^1 -B(OH)₂, then R^2 is not substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl.